



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,595	02/12/2002	Yoshikazu Aoki	122.1487	4322
21171	7590	07/06/2007		
STAAS & HALSEY LLP			EXAMINER	
SUITE 700			HO, ANDY	
1201 NEW YORK AVENUE, N.W.				
WASHINGTON, DC 20005				
			ART UNIT	PAPER NUMBER
			2194	
			MAIL DATE	DELIVERY MODE
			07/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/073,595	Applicant(s) AOKI, YOSHIKAZU	
	Examiner Andy Ho	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. In view of the appeal brief filed on 2/20/2007, PROSECUTION IS HEREBY REOPENED. Responsive to Applicant's arguments, new grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. Claims 1-18 have been examined and are pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devins U.S Patent No. 6,762,761.

**As to claim 17**, Devins teaches a method of controlling the operation in a computer system (Fig. 4), the method comprising:

automatically recognizing an operation status of the computer system (responsively to the status information, line 53 column 2; the system executes the instruction when the DLP 25 recognizes specified status information within the status register, line 58 column 3 to line 7 column 4) in which an operation status represents what process is currently under execution (...contain status information relating to graphics operations performed by the accelerator under the control of instructions in a captured program...,lines 15-20 column 5), and

automatically starting the corresponding predetermined job (to cause the captured programs to execute, line 52 column 2), determined based on the recognized operation status (recognizes specified status information, line 58 column 3 to line 7 column 4).

Devins does not explicitly teach controlling the operating of an operating system. However, Devins teaches (lines 59-63 column 8) the system of the invention is implemented within an operating system. Therefore one of ordinary skill in the art would conclude that the method of Devins is used to control the operation of an operating system.

**As to claim 18**, Devins as modified further teaches the predetermined job is automatically executed in an operation status of the system (the captured programs to execute, line 52 column 2) after said operation status has been

Art Unit: 2194

automatically recognized (responsively to the status information, line 53 column 2; the system executes the instruction when the DLP 25 recognizes specified status information within the status register, line 58 column 3 to line 7 column 4).

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devins U.S Patent No. 6,762,761 in view of Matsumoto U.S Patent No. 5,835,765.

**As to claim 1**, Devins teaches a method of controlling operation in a computer system (Fig. 4), comprising:

various operation statuses of the computer system (sequence of computer-executable instructions, line 1 column 4) in which an operation status represents what process is currently under execution (...contain status information relating to graphics operations performed by the accelerator under the control of instructions in a captured program..., lines 15-20 column 5), according to changes in the operation status (...monitor the status register 100 in accelerator 30, and delay execution of instructions in memory 20 until the status register contains specified status information..., lines 64-67 column 3), and storing the operation statuses in a memory section within the computer system (instructions stored in memory 20, line 48 column 3);

recognizing a predetermined operation status of the computer system (specified status information is present in status register 100, line 52 column 3), depending on whether a predetermined operation status exists within the memory section or not (executable instructions stored within the memory ready

Art Unit: 2194

to be executed when the status is ready, line 58 column 3 to line 7 column 4);  
and

controlling the operation in according to a result of the recognition (the system executes the instruction when the DLP 25 recognizes specified status information within the status register, line 58 column 3 to line 7 column 4), thereby automatically starting a job, determined based on the recognized operation status (recognizes specified status information, line 58 column 3 to line 7 column 4), that can be executed (to cause the captured programs to execute, line 52 column 2) in the operation status of the system after the operation status has been recognized (responsively to the status information, line 53 column 2).

Devins does not explicitly teach controlling the operating of an operating system. However, Devins teaches (lines 59-63 column 8) the system of the invention is implemented within an operating system. Therefore one of ordinary skill in the art would conclude that the method of Devins is used to control the operation of an operating system.

Devins further does not explicitly teach storing operation statuses as files. Matsumoto teaches (lines 51-67 column 2) a system of computer operation management system wherein operation statuses of running application programs are stored as log files. It would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Devins reference to include the teachings of Matsumoto reference because by storing operation status of running application programs as log files, the system could control the

Art Unit: 2194

execution of a running application program, as disclosed by Matsumoto (lines 51-67 column 2).

**As to claim 2**, Devins as modified further teaches the control of the operation of the operating system is for starting a predetermined job (graphics operations, line 37 column 2).

**As to claim 3**, Devins as modified further teaches the predetermined job consists of a plurality of programs (hardware programs of the graphics operations, lines 35-37 column 2; captured as an executable program on memory 20, lines 66-67 column 4).

**As to claim 4**, Devins as modified further teaches the starting of the predetermined job is determined based on whether a plurality of the files exist or not within the memory section (executable instructions stored within the memory ready to be executed when the status is ready, line 58 column 3 to line 7 column 4).

**As to claim 5**, it is a method claim of claim 4. Therefore, it is rejected for the same reasons as claim 4 above.

**As to claim 6**, Devins as modified further teaches each of the files is provided with an alias (a unique mnemonic identifier, lines 63-64 column 4), and the operation status of the computer system is recognized based on the alias (...once captured as an executable program, it can be executed on demand by specifying its assigned mnemonic. The Execute\_Program instruction causes the DLP 25 to read the hardware instructions corresponding to id stored in memory

Art Unit: 2194

20, and issue the instructions to accelerator 30..., line 66 column 4 to line 12 column 5).

**As to claims 7-10**, they are method claims of claim 6. Therefore, they are rejected for the same reasons as claim 6 above.

**As to claim 11**, Devins as modified further teaches changing the operation status of the computer system based on a starting of the predetermined job (...fetches instructions in the captured program and issues them to a graphics accelerator, which executes the instructions to perform graphics operations. The graphics accelerator includes status registers containing status information relating to the graphics operations performed by the accelerator..., lines 41-46 column 2); and starting a second job according to the changed new operation status of the computer system (ability to cause the captured programs to execute responsively to the status information allows a programmer to link graphics operations to specific hardware events represented by the status information, lines 52-55 column 2).

**As to claims 12-15**, they are method claims of claim 11. Therefore, they are rejected for the same reasons as claim 11 above.

**As to claim 16**, it is a computer program product claim of claim 1. Therefore, it is rejected for the same reasons as claim 1 above.

### ***Response to Arguments***

5. Applicant's arguments filed 2/20/2007 have been fully considered but are moot in view of the new ground(s) rejection.



Art Unit: 2194

Applicant's arguments presented issues which required the Examiner to further view the previous rejection. The Examiner conducted a further search regarding the issues mentioned in Applicant's response. Therefore, all arguments regarding the cited references of the previous rejection are moot in view of the new grounds of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIM) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2194

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:

Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (571) 273 - 8300.
- OFFICAL faxes must be signed and sent to (571) 273 - 8300.
- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H  
June 21, 2007

A handwritten signature in black ink, appearing to read "Andy", with a long horizontal flourish extending to the right.